the only "most significant participants" in long distance product markets, that WorldCom is the leading provider of wholesale capacity to resellers,³³ and that new entrants will not be effective competitors in the supply of wholesale or retail services for the foreseeable future. GTE also performed an HHI analysis revealing that concentration in the retail market would increase by well over 200 points – an amount that, in a highly concentrated market, is "likely to create or enhance market power" under the DOJ's Merger Guidelines.

Without offering their own list of significant market participants in either the retail or the wholesale markets, WorldCom and MCI dispute GTE's showing on two related grounds. First, they assert that new entrants – those in the "other" category in the Commission's market share data – are of "increasing competitive importance." Second, based on this claim, they imply that the HHI concentration figures are misleading and do not indicate any cause for concern. Neither argument has merit.

GTE will demonstrate at length in Section II.D.1. below that new entrants (including Qwest, IXC, Frontier, Excel, Level 3, and others) will not provide an effective competitive presence in either the retail or the wholesale market for many years to come. As Dr. Harris explains, these new networks "do not have sufficient coverage to assure workable competition in the supply of long distance transport" and face a

³³ Further information regarding WorldCom's status as the leading wholesale provider is presented in the text later in this section.

³⁴ Joint Reply at 30.

multitude of other barriers to entry that will take considerable time to overcome.³⁵

Accordingly, these entities cannot be considered "most significant participants" now or in the next few years. By the Commission's own terms, they do not have, and are not likely to "speedily gain," the capabilities to compete "effectively" and "soonest"³⁶ in either the retail or wholesale markets.

In fact, proper consideration of the "other" category would result in an even higher pre- and post-merger HHI than reported in GTE's Petition. The vast majority of these carriers are either pure or predominantly resellers, who obtain capacity or minutes of use from the Big 4.³⁷ Indeed, WorldCom certainly has a greater share of the supply of wholesale minutes than it does in the retail market. Its status as the leading provider of wholesale capacity to resellers is confirmed by Dr. Harris, who notes that AT&T's share of the wholesale market has fallen to approximately 20 percent, that Excel's (the fifth largest long distance carrier) primary capacity supplier is WorldCom, and that IXC's primary capacity suppliers are MCI and WorldCom.³⁸ GTE, of course, is heavily dependent on WorldCom for the supply of long distance services for resale.

³⁵ Harris LD Affidavit at 3; see also Schmalensee/Taylor Affidavit at 25-30.

³⁶ Bell Atlantic/NYNEX Order, ¶ 58.

³⁷ Harris LD Affidavit at 8-9. As discussed below in Section II.D, the growing success of these resellers has paralleled WorldCom's growth, strongly suggesting that changing WorldCom's incentives to serve the wholesale market would undermine continued opportunities for growth. Because resellers predominantly serve residential and small business customers, such a development would detrimentally affect competition in the retail mass market.

³⁸ Harris LD Affidavit at 9, 15.

Exhibit 23 to Dr. Harris's LD Affidavit is a chart depicting estimated shares of the wholesale supply market, which indicates that WorldCom is the leading supplier, MCI is the third largest supplier, and the merger would increase the HHI for the supply of resale capacity to switched resellers by 480 points and to switchless resellers by 390 points.³⁹ Attributing the resellers' minutes back to the underlying carrier would therefore both increase the interexchange market concentration figure generally and disproportionately increase the additional concentration caused by the combination of WorldCom and MCI.

D. WorldCom and MCI Have Not Provided Evidence To Refute GTE's Showing That the Merger Will Decrease Wholesale and Retail Long Distance Competition.

The next step in the *Bell Atlantic/NYNEX* analysis is to determine whether the merger would adversely affect competition in any relevant market. In attempting to refute the warnings by GTE and other petitioners that the merger would raise grave risks to competition in wholesale and retail long distance markets, the Joint Reply essentially rests its case on three arguments. First, WorldCom and MCI claim that new entry by fiber-based carriers will assure that the merger does not adversely affect long distance competition. Second, the Applicants dispute GTE's characterization of

The concentration effects of the merger are similarly egregious when measured in terms of number of owned points of presence ("POPs"), which can be used as a proxy for capacity to serve the wholesale market. Based on this measure, Schmalensee and Taylor calculate that the merger would increase the HHI from 2387 to 2815. Schmalensee/Taylor Affidavit at 14-15 & Exhibit 5. Schmalensee and Taylor also demonstrate that large increases in concentration exist when ownership of fiber capacity is examined and explains that both of these measures understate concentration because they do not take account of all of the complex elements necessary to create a complete network. *Id.* at 15 & Exhibit 6.

WorldCom as a "maverick" supplier of wholesale capacity and deny that WorldCom's incentives would change after the merger. Third, the Joint Reply suggests that the long distance market is already vibrantly competitive.

None of these claims can withstand scrutiny. In reality, as Dr. Harris concludes, "[t]he proposed merger, if approved, will adversely affect the nation's consumers and businesses":

There will be a marked reduction in the number of active competitors, which will have an attendant effect on prices. . . . The barriers to entry . . . identified combined with the trend in horizontal integration of interexchange services onto the same facilities, make it unlikely that new entry could check the adverse effects of this merger in the medium term. . . Given that the interexchange industry is oligopolistic now, the merger would further forestall competition, resulting in a permanent loss of consumer welfare. 40

Substantial Barriers To Entry Will Prevent New Entrants
 From Becoming Effective Competitors in Wholesale or
 Retail Long Distance Markets for Several Years.

WorldCom and MCI state that "[i]n the long distance market, additional entry is both easy and certain to occur." This blithe assessment, however, rests solely on announcements by several carriers that they will deploy substantial fiber capacity in the near future. It is devoid of analytical rigor and inconsistent with antitrust standards for assessing the impact of market entry in mitigating the anticompetitive impact of proposed mergers. In reality, as discussed below and explained in further detail in the attached Harris Long Distance Affidavit, fiber capacity alone will not enable new entrants to create an effective competitive check on the extremely concentrated post-

⁴⁰ Harris LD Affidavit at 46.

⁴¹ Joint Reply at 34.

merger long distance industry. All new entrants will face tremendous barriers that will preclude them from becoming effective competitors, if at all, for at least five years.

a) Entry Should Only Be Relied Upon To Deter or Counteract the Adverse Competitive Impact of the Merger If It Is Timely, Likely, and Sufficient.

The DOJ/FTC *Merger Guidelines* establish a clear and precise test for determining whether new entry should be counted on to offset the anticompetitive effects of a proposed horizontal merger.⁴² This test requires that "entry . . . be timely, likely, and sufficient in its magnitude, character and scope to deter . . . the competitive effects of concern."⁴³

With respect to timeliness, the *Merger Guidelines* emphasize that "[t]he Agency generally will consider timely only those committed entry alternatives that can be achieved within two years from initial planning to significant market impact." Entry is "likely" if it would be profitable at pre-merger prices and the entrant is likely to secure such prices. A critical consideration in examining the likelihood of entry is whether entrants may flexibly choose their scale – that is, whether entrants will be able to operate at a scale that will permit them to achieve economies that enable them to compete effectively. Finally, committed entry is sufficient only if it will nullify the anti-

⁴² Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, April 2, 1992, at Section 3.0 (Entry Analysis - Overview) ("*Merger Guidelines*").

⁴³ Id.

⁴⁴ Id., Section 3.2 (Entry Analysis - Timeliness of Entry).

⁴⁵ *Id.*, Section 3.3 (Likelihood of Entry) and 3.4 (Sufficiency of Entry); see Harris LD Affidavit at 18-19.

competitive effects of the merger. The sufficiency analysis examines an entrant's ability to "respond to the sales opportunities opened by the post-merger anticompetitive effects." In this regard, Dr. Harris notes that "the Merger Guidelines identify the situation where certain tangible and intangible assets required for effective entry remain under incumbent control."

Given this framework, it is clear that the new entry touted by the Applicants as a panacea for prospective competitive harms cannot be considered timely, likely, or sufficient. Rather, the new entry cited by WorldCom and MCI will have no appreciable mitigating impact on the detrimental competitive effects of the merger in long distance markets.

b) New Entry Will Not Ameliorate the Adverse Impact of the Merger on Long Distance Competition.

In assuring the Commission that the merger of the second and fourth largest IXCs will not detrimentally affect competition, MCI's experts rely heavily on the assertion that "[w]ithin about two years ... there will be seven national fiber optic networks." Even if these new networks truly were national, however – and as shown below and in Dr. Harris's Affidavit, they clearly are not – the Applicants and their experts fail to note

⁴⁶ Harris LD Declaration at 21.

⁴⁷ Id., citing Merger Guidelines, Section 3.4 (Sufficiency of Entry).

⁴⁸ Carlton/Sider Declaration at ¶ 33.

that deploying fiber is merely the first, and in many ways the easiest, step in becoming a facilities-based provider.⁴⁹

To become an effective competitor in the wholesale and retail markets requires far more than just fiber. In the wholesale market, an entity hoping to supply capacity to nationwide resellers must develop a secure, reliable, and well-managed network that reaches the vast majority of the country. Such an entity must also demonstrate that it is capable of developing, providing, maintaining, and billing both basic and advanced services, and that it has the capacity to carry the substantial volume of traffic required to achieve a cost-efficient network that is capable of competing against the major incumbents. None of the new entrants will be able to meet such requirements for several years. In the retail market, the path to becoming an effective competitor is even longer and more tortuous. Any new entrant setting its sights on becoming a major retail competitor must deploy a ubiquitous, sophisticated network and support systems and develop a strong brand name in the face of incessant advertising by the incumbents.⁵⁰

In short, the Applicants' reliance on new entry as a check against the adverse effects of the proposed merger is entirely misplaced. Fiber is a necessary but by no means sufficient prerequisite to becoming an effective competitor. As summarized below and explained in detail by Dr. Harris, tremendous barriers to entry and growth exist with respect to geographic coverage; economies of scale; deployment of switches

⁴⁹ See also Schmalensee/Taylor Affidavit at 25-30.

⁵⁰ See generally Harris LD Affidavit at Section II and III. As Dr. Harris notes (at 36), the Big 3 carriers' "huge outlays to maintain brands are essentially devices to deter entry."

and other equipment; implementation of Signaling System 7 (SS7) capabilities; development of operations support, network management and back office (provisioning, inventory management, facility management and design, *etc.*) systems and software to support new services, reliability; the availability of a qualified work force.

Geographic coverage. None of the new entrants will have a truly nationwide network for many years. Understandably, these entrants are focusing their efforts on providing bulk transport between large metropolitan areas, with limited (if any) coverage of other areas. Indeed, the carriers prominently mentioned in the Joint Reply — Frontier, Cable & Wireless, IXC, and Qwest — do not come close to approaching the level of coverage of the Big 4 carriers. For example, approximately two-thirds of IXC's 20,000 miles of fiber is located in only five states. While Frontier's network map depicts a largely nationwide footprint, most of its facilities are still leased. In fact, Frontier uses 32 different vendors, is trying to integrate five different networks, and has no common network management capabilities. Nor will Qwest's network, even when fully

Harris LD Affidavit at 11. Dr. Harris explains that "[n]ew entrants such as IXC Communications and Qwest are not operating or building full national networks comparable to those of the Big 3 or WorldCom. First, these networks are quite far from being fully built. . . . Second, these new networks are 'sparse,' in the sense that they are designed to provide bulk transport between large metropolitan areas, with only limited capacity to serve other areas of the country. . . . These new networks would therefore need to rely to a considerable extent on the POPs of the Big Three. In other words, the coverage structure of the industry is not likely to change appreciably in the near future." Harris LD Affidavit at 14. Dr. Harris provides network coverage maps for many of the new entrants at Exhibits 12-15 to his Affidavit.

⁵² For example, Dr. Harris states that "Frontier's estimated on-net traffic is only 49% of its total volume" Harris LD Affidavit at 10.

deployed, be truly nationwide, as shown in Exhibits 8 and 9 to Dr. Harris's Affidavit.⁵³
Consequently, "even if these backbone networks are eventually fully built-out, the new networks to which Carlton and Sider refer will still remain reliant on capacity provided by the Big Three and WorldCom."⁵⁴ The need to do so imposes substantial expense, raises the new entrants' cost structure, and perpetuates reliance on the existing incumbents.⁵⁵

A closely related aspect of the coverage issue is the number and location of POPs, which are points where the IXC's network interconnects with the local exchange carrier for originating and terminating access. The closer the POP is to the local exchange carrier's customers, the less expensive the costs of access. Today, only AT&T, MCI, and Sprint have POPs (and in many cases, multiple POPs) in every LATA. WorldCom, even though its network covers approximately 82 percent of the national population, still does not have a POP in roughly 90 of the nearly 200 LATAs.

⁵³ Qwest's announced acquisition of LCI does not change this conclusion: "Qwest's reach would not change significantly even with its proposed acquisition of LCI, as LCI's facilities are concentrated in the upper Midwest, where Qwest has already built out its network." Harris LD Affidavit at 14.

⁵⁴ Harris LD Affidavit at 21.

⁵⁵ Coverage also has an international dimension. The new entrants rely extremely heavily on WorldCom and the Big 3 for international service. See Harris LD Affidavit at 16. Consequently, their control over underlying costs and their ability to monitor network quality and reliability and to develop new products is minimal.

⁵⁶ Harris LD Affidavit at 7.

⁵⁷ Sprint actually is missing POPs in a handful of rural areas.

As WorldCom's experience confirms, the new entrants will face a daunting and tremendously expensive task in deploying POPs. Initially, and for quite some time, they will have to rely on a combination of "on-net" POPs (those on their transport network), off-net POPs that they own but must reach through transport facilities leased from another provider, and POPs that are leased from other carriers (along with the transport to reach them). The use of off-net POPs creates a significant cost penalty. In this regard, Dr. Harris estimates that the cost of using fully off-net POPs imposes additional costs of some 1.6 cents per minute on new entrants, placing them at a significant disadvantage compared to the Big 3 and WorldCom. Similarly, Schmalensee and Taylor state that "the cost for transport is less than half as much when a carrier can use its own [POPs] at both ends as when it must purchase originating or terminating service for its traffic 159

Exhibits 2-5 and 10 to Dr. Harris's Affidavit show that the new entrants will have very few on-net POPs. This means that resellers obtaining capacity from the new entrants will face higher costs for serving many areas of the country. As Dr. Harris explains:

Carriers with regional or limited networks cannot provide adequate competition to check the anticompetitive effects of the proposed merger. The potential coverage of "new" networks is overstated, as even the most aggressive entrant will take several years to deploy coverage, through "on-net"

⁵⁸ Harris LD Affidavit at 12.

⁵⁹ Schmalensee/Taylor Affidavit at 28 & Exhibit 17.

POPs, comparable to that of a Big Three supplier or WorldCom.⁶⁰

Accordingly, "networks other than the Big Three's and WorldCom's are not capable of providing adequate, workable competition, as they simply do not have sufficient coverage throughout the country." The new entrants will not be able to replace the loss of WorldCom as an independent wholesaler for many years.

Economies of scale.⁶² For several years after initiating service, new entrants will be unable to capitalize on economies of scale that apply to the Big 4. For example, as Dr. Harris explains, "the average cost of the connections between POPs and the backbone is highly volume sensitive":

When a carrier first enters the interexchange business with its own facilities, it will establish POPs in its major service areas, and choose to connect them in the most economic way. Initially, the connection might just involve purchasing the connection on a minute-of-use basis from another network. As the volume of traffic between the carrier's POPs in an area and the backbone increases, the carrier would move to leasing high-capacity circuits such as DS1s

⁶⁰ Harris LD Affidavit at 15-16.

⁶¹ Harris LD Affidavit at 13.

⁶² Harris LD Affidavit at 20-21. Dr. Harris demonstrates that the long distance industry is characterized by large economies of both scale and scope, rebutting MCI witness Hall's claim to the contrary. For example, Dr. Harris states that "it is clear that the interexchange business is characterized by strong returns to route density." *Id.* Dr. Harris also refutes Dr. Hall's claim that the long distance industry does not experience a high level of sunk costs; in reality, the prospect of sunk costs is a significant problem for new entrants since "[t]ransmission assets ... are geographically specific and are very difficult to redeploy" and entrants need to make substantial investment in the engineering of the network equipment that is required to create a functioning interexchange network." *Id.* at 19.

and DS3s.... When traffic on that route reaches sufficient density, the carrier might secure long-term dark fiber leases and add its own electronics to form the connection, or even construct its own fiber line. Average costs per minute of traffic fall substantially with every shift across this continuum from a minutes-of-use connection to owned fiber.⁶³

In addition, new entrants will be forced to connect to access tandems rather than end offices and to use proportionately more switched rather than dedicated access, significantly increasing their access costs. As Dr. Harris explains, "[t]hese economies imply that entrants in the interexchange industry are likely to operate at a substantial operational cost disadvantage against large incumbents."⁶⁴

Switching and other equipment. Fiber, standing alone, is simply strands of glass. It is useless unless "lit," which involves deploying electronics at both ends to transmit signals and convert optical to electronic signals, and placing repeaters at intervals along its length. These electronics – fiber optic terminals and similar equipment – are expensive to deploy. Once lit, the network requires other equipment to derive useful increments of capacity (multiplexers and cross-connects), provide switched services (interexchange switches), and connect those switches to the LECs' access tandems or end offices (T1 lines). A new entrant cannot simply deploy all of this equipment at once and declare itself in business. Rather, the expense of doing so is

⁶³ Harris LD Affidavit at 8. This analysis is buttressed by WorldCom's own Transcend tariff, which charges resellers considerably more for using lower capacity facilities with higher average costs. See Schmalensee/Taylor Affidavit at 28 & Exhibit 16.

⁶⁴ Harris LD Affidavit at 21.

⁶⁵ Harris LD Affidavit at 7.

massive and must be spread over many years, so that equipment is deployed only as traffic growth warrants. Far from "build it and they will come," a new entrant must be sure it will have customers before it lights its fiber and purchases and deploys the related equipment.⁶⁶

SS7. SS7 deployment is another critical piece for building an efficient network. First, SS7 prevents capacity from being tied up when the called party is on the telephone. Unless a carrier deploys SS7 and interconnects with the SS7 networks of other IXCs and LECs, it will have to occupy capacity even when the phone on the other end is busy, limiting the overall traffic load that its network can carry and requiring inefficient investment to meet peak demand. Second, SS7 is crucial for providing advanced services to sophisticated users. For example, it enables 800 customers to direct the calling party information transmitted as part of the SS7 message to an internal customer service data base, allowing for more responsive service. SS7 also is useful for complying with the Communications Assistance for Law Enforcement Act ("CALEA") and is needed to provide CLASS services. The smaller carriers have much lower SS7 deployment and interconnection than the Big 4, seriously compromising the attractiveness of their networks for both retail and wholesale customers. Indeed, WorldCom has only just made its SS7 network operational, confirming that signaling deployment is a major barrier to entry that will take the new entrants years to overcome.67

⁶⁶ Harris Affidavit at 19.

⁶⁷ Harris LD Affidavit at 22.

OSS and other software. An important part of being an effective competitor in both the wholesale and retail markets is having sophisticated operations support systems ("OSS") and back office systems for ordering, provisioning, inventory management, facility management and design, maintenance, and billing. Developing these systems can take several years; in the interim, resellers and end users inevitably will find that the new carrier is not as responsive or capable as the incumbents.

Similarly, substantial resources and time are needed to write and deploy the software needed to provide the enhanced features that are a major facet of competition in the long distance industry. As discussed in GTE's Petition and noted below, WorldCom is the only wholesaler willing to provide such features to resellers today. If the merger is consummated, WorldCom's incentives will shift and resellers will be left without access to such features until new entrants can provide them.

Reliability. The coverage issue discussed above also has ramifications for network reliability. The major IXCs have fiber networks constructed as bi-directional rings to maintain connectivity in the event of a fiber break. The newer networks, at least initially, will be vulnerable to outages because they deploy "spurs," which are

⁶⁸ Harris LD Affidavit at 18.

⁶⁹ Dr. Harris explains that "customized software is required to act as a glue between all these pieces of equipment and to provide the functionality that sophisticated users demand. . . . It must be understood that an interexchange network is essentially a large web of specialized computers. The fiber connecting them is nothing more than a transmission medium, just as silicon is in computers. The quality and features of the network mostly lie in the application software engineered by carrier technicians." Harris LD Affidavit at 8.

⁷⁰ Harris LD Affidavit at 16.

routes without diversity. Any reseller will be justifiably concerned about taking capacity from a network that is not fully diverse, since it must be able to assure its customers that its service will be reliable.

Reliability is also compromised by the new carriers' reliance on off-net POPs. A carrier leasing a POP from a third party loses operational control over its network, since it must rely on the underlying carrier to provide adequate monitoring and maintenance. In addition, reliability is further implicated by the time and expense of developing sophisticated network management software and expertise. While off-the-shelf network management tools are available, these must be customized for each network.

Optimizing these tools, and learning how to use them effectively, necessarily takes time. Thus, any new carrier will not be able to manage its network as efficiently and reliably as an incumbent for many years. In this area, too, resellers will be leery about committing large amounts of capacity to a new entrant.

Availability of a qualified work force. There is a real shortage of qualified network engineers and telecommunications software developers. In today's marketplace, employees with expertise come at great expense. As the various new entrants compete to hire expert employees, they will face high and ever increasing costs, exacerbating the cost disadvantage they face compared to the incumbents.

The Applicants argue that "the success of MCI, WorldCom, and myriad other interexchange carriers that began as switchless resellers and now have substantial

⁷¹ Harris LD Affidavit at 13.

networks . . . [shows that] it is becoming easier, not harder, to become a facilities-based interexchange carrier."⁷² In fact, however, the growth of these companies shows that it takes several years to build a network capable of challenging the three largest carriers. For example, it has taken WorldCom more than five years to grow from \$1 billion in revenue to a position in which it can compete with AT&T, MCI, and Sprint. Similarly, it took Sprint six years to deploy its current network, even though it was working at a breakneck pace.

The current second, third, and fourth largest carriers were formed prior to the AT&T divestiture in 1984. Fifteen years later, the market has not changed substantially, and AT&T is still significantly larger than any other carrier. If new entry were as easy as WorldCom and MCI suppose, the market would look considerably different. In reality, it will take more than five years before any new entrant will be in a position to take WorldCom's place as the only low-cost, responsive provider of wholesale capacity and advanced services to resellers. As Dr. Harris cautions:

The merger would increase the concentration of control of the facilities necessary to supply interexchange services, such as fiber optic transmission capacity, interexchange switching capacity, SS7 connectivity, and points-of-presence. The merger would also substantially reduce the number of entities that can supply value-added interexchange services such as virtual private networks and enhanced 800 services, and more generally, the enhanced features based on common channel system 7 signaling. As smaller carriers cannot yet provide many of the value-added or enhanced services . . . the result is an even further concentrated industry . . . Additionally, the merger would substantially concentrate the entities providing data-based value-added interexchange services . . . If approved, the proposed merger will return industry concentration to pre-1996 levels . . . Given the barriers to entry in this industry, it

⁷² Joint Reply at 39 (citation omitted).

seems likely that new entry would not be sufficient to offset this loss in the medium term.⁷³

Consequently, the threat to wholesale competition – and to consumers who rely on resellers for service – is thus very real and unchecked by actual or potential entry.

2. WorldCom Will No Longer Act As a Maverick in the Wholesale Market if the Merger Is Approved.

WorldCom's and MCI's second line of defense against claims that the merger will undermine long distance competition is to assert that WorldCom is not a maverick, and, in any event, the merger will not change WorldCom's welcoming attitude toward resellers. The experience of GTE and other resellers demonstrates that the Applicants are flat wrong. In reality, WorldCom is the only one of the Big 4 IXCs that affirmatively seeks to serve resellers. The merger, however, would change all that. As Schmalensee and Taylor caution:

While the Big Three invested in setting up these [retail] operations and in developing their brand names through billions of dollars in marketing expenses, WorldCom chose to focus on the wholesale market on which smaller resellers depend for inputs to serve residence and low-volume business customers. WorldCom's growth has gone hand in hand with these entrants, while the Big Three have chosen to keep their rates higher and concede market share to them. The merger would reduce WorldCom's incentive to continue operating as a maverick source of wholesale long distance service and would thus lead to higher wholesale prices and less effective competition from the resellers. This reduced competition is important because the resellers have offered lower prices and alternative services to the benefit of consumers.⁷⁵

⁷³ Harris LD Affidavit at 25-26 (emphasis added).

⁷⁴ Joint Reply at 42.

⁷⁵ Schmalensee/Taylor Affidavit at 16.

a) WorldCom Currently Acts as a Maverick.

GTE explained at length in its Petition that WorldCom has chosen to focus on the wholesale market rather than trying to develop a national brand that would make it a major presence in the retail mass market. Because of its different approach, WorldCom has been far more favorable in its dealings with resellers than have AT&T, MCI, and Sprint. Indeed, as Schmalensee and Taylor show, the rapid growth of resellers over the past few years "has gone hand in hand with growth of WorldCom's wholesale operations." WorldCom's status as a maverick is confirmed by several aspects of its relationships with resellers: 77

Pricing and billing policies. WorldCom is generally the lowest cost provider. Its transport rates are usually below those of AT&T, MCI, and Sprint, and its cost advantage is even greater once access is factored in.⁷⁸ This is so because the three largest carriers mark up access charges, often significantly, while WorldCom passes through access charges to its resellers at cost plus a modest administrative fee. In addition, WorldCom is willing to bill access in sub-minute increments, rather than on a per-minute basis.⁷⁹

⁷⁶ Schmalensee/Taylor Affidavit at 9-10 & Exhibit 3.

⁷⁷ See generally Harris LD Affidavit at 37-39.

⁷⁸ WorldCom's transport prices also are lower than those of smaller carriers, and its greater POP deployment and network build-out give it a substantial access cost advantage.

⁷⁹ Harris Affidavit at 35.

Reasonable terms and conditions. WorldCom's maverick status also flows from its unique willingness among the larger IXCs to offer reasonable terms and conditions to resellers. For example, the three major carriers charge a transaction fee on every access order, while WorldCom does not. Similarly, WorldCom does not require a minimum volume commitment from resellers, while the other carriers do. WorldCom also is willing to brand for resellers, while AT&T, MCI, and Sprint either will not brand or are unable to do so.⁸⁰ Furthermore, WorldCom allows resellers to inform their customers that WorldCom is the underlying carrier in order to allay customers' concerns about quality; AT&T, MCI, and Sprint do not.

Willingness to provide advanced services. Of great importance, WorldCom is willing to provide advanced capabilities such as virtual private networks and enhanced 800 services to resellers. WorldCom also has been willing to commit to schedules to develop platforms for enhanced services. The other major IXCs, with few exceptions, have been far less responsive to requests for such services.

b) WorldCom's Incentives Would Change after the Merger.

The Joint Reply is also wrong in asserting that the merger would not change WorldCom's incentives, and, more specifically, that there is no basis for WorldCom to be concerned about "cannibalizing" MCI's retail customers.⁸¹ In actuality, the merger would adversely affect the wholesale market – and thus the retail customers

⁸⁰ In addition, a recent study has found that WilTel (a WorldCom subsidiary) provides better billing services than the other major carriers. Harris LD Affidavit at 38.

⁸¹ Joint Reply at 52.

(predominantly residential and small business) who are served by resellers⁸² – in two ways.

First, WorldCom inevitably would become less aggressive in serving resellers.

Currently, as a carrier with limited retail operations, ⁸³ WorldCom can maximize its profits by increasing its share of the wholesale market. The calculus would change, however, if WorldCom obtained MCI's sizable retail customer base. The merged company would receive roughly 29 percent of its revenues from residential and small business customers. ⁸⁴ Consequently, it would be loath to assist resellers in taking away those retail customers. As Schmalensee and Taylor explain, "[b]ecause retail margins are much higher than wholesale margins (reflecting both oligopolistic behavior in retail markets and the high fixed costs of retail marketing), MCI-WorldCom would profit more by selling at retail than at wholesale to resellers. ⁸⁵ Quite simply, "carriers with large retail customer bases have substantial economic incentives to discourage resale. ⁸⁶

⁸² Schmalensee and Taylor (at footnote 5) cite to industry reports that resellers receive more than 60 percent of their revenues from residential and small business customers.

⁸³ WorldCom receives only approximately 15 percent of its revenues from residential and small business customers. Schmalensee/Taylor Affidavit at 19.

⁸⁴ See Schmalensee/Taylor Affidavit at 20 & Exhibit 15. Schmalensee and Taylor further note that the merged company's share of the residence and small business retail market may be over 14 percent, compared to only about 2 percent for Worldcom standing alone. *Id*.

⁸⁵ Schmalensee/Taylor Affidavit at 21. Schmalensee and Taylor also provide a quantitative example further illustrating why WorldCom's incentives to serve the wholesale market would change after the merger. This example concludes that, when WorldCom is unintegrated, "the opportunity cost of expanding wholesale sales amounts to 0.1 cents per minute, leaving a margin of 0.4 cents per minute from supplying wholesale service." In contrast, as a result of the higher retail market share of the (Continued...)

Second, as long as WorldCom has a small retail base and acts as an aggressive wholesaler, AT&T, MCI, and Sprint have to provide some resale to avoid losing traffic to WorldCom. However, if WorldCom acquires a large retail base (like MCI) and changes its maverick ways, the remaining large IXCs will become even less receptive to resale than they are today.⁸⁷ The performance of the entire wholesale market, therefore, will change dramatically for the worse.⁸⁸

With WorldCom eliminated as a maverick competitor, prices in the wholesale market will increase. Resellers, which already operate on thin margins, ⁸⁹ will be forced to pass these increases through in their retail rates. Accordingly, they will become a

^{(...}Continued) combined company, "an additional minute of wholesale service supplied would result in an expected decrease in retail demand of 0.14 minutes, amounting to an opportunity cost (per minute) of 0.7 cents. An opportunity cost of this magnitude overwhelms the margin from wholesale service and implies that a profit-maximizing vertically integrated firm with an established brand would serve only the retail market." Schmalensee/Taylor Affidavit at 23; see also Exhibit 16.

⁸⁶ Harris LD Affidavit at 37.

⁸⁷ Harris LD Affidavit at 37.

The impact on resellers would be further aggravated because of increased concentration in the high-end business market. While such customers to date have enjoyed more price competition than mass market consumers, the merger would give the combined company roughly 55 percent of this market and raise the HHI almost 1100 points to 4286. This increase in concentration "would make it easier for the Bigger Three to raise prices than the Big Three could while WorldCom remains an independent entity." Because "some resellers purchase out of the same tariffs offered to large business customers, reduced competition in this market could translate to higher prices in residence and small business markets." Schmalensee/Taylor Affidavit at 14; see also Exhibit 4.

⁸⁹ See Schmalensee/Taylor Affidavit at 25

less potent check on the ability of the remaining large IXCs to charge supra-competitive prices and to engage in unreasonable price discrimination (such as charging a residential customer two to three times what a business customer pays for the same service). As Schmalensee and Taylor caution:

Up to now, resellers have brought benefits to consumers by offering price/service combinations that have allowed them to capture a growing share of long distance markets. The evidence also suggests that, absent the merger, resellers may have gained enough of the market to begin to undermine the price discipline of the Big Three.

Unfortunately, if the proposed WorldCom/MCI merger is consummated, the Big Three's oligopoly pricing would be more likely to continue and could actually worsen. Since WorldCom has historically been disproportionately – compared with the Big Three – focused on the provision of wholesale services to resellers, it has nurtured the efforts of resellers to expand in the residential (and small business) long distance market. Its merger with MCI would reduce these differences from the other carriers and increase the prospects that the price-following behavior described above will be perpetuated.⁹⁰

Clearly, then, contrary to the rosy picture painted in the Joint Reply, the merger would impair competition in both the wholesale and retail markets, with a particularly adverse impact on residential and small business consumers.

⁹⁰ Schmalensee/Taylor Affidavit at 8. Schmalensee and Taylor point to the beneficial impact of SNET's entry as a long distance provider in Connecticut as support for his conclusion that the entry and expansion of major resellers, but for the merger, might enable them to discipline the prices of the major IXCs. *Id.*; see also id. at 10-13.

3. The Applicants Have Failed To Rebut Evidence That the Retail Mass Market Is Not Effectively Competitive.

The Applicants' third major argument is that the retail long distance market is vigorously competitive today and that the level of retail competition will not decline as a result of the merger.⁹¹ They are wrong on both counts. As GTE and other petitioners have already explained, the retail market today, particularly for residential and small business consumers, is beset by coordinated rather than competitive pricing.⁹² As Dr. Harris explains:

The interexchange industry exhibits classic characteristics of oligopolistic competition. . . . Firms in an oligopolistically competitive market tend to compete on a basis other than price, through product differentiation, advertising, service, and other non-price inducements. . . . Generally . . . an oligopolistically competitive structure is characterized by lockstep pricing, price dispersion, non-price competition, price discrimination, widening price-cost margins and failure by suppliers to pass through input price reductions to consumers. 93

Simply stated, further consolidation in an industry that is already highly concentrated, combined with enervation of the wholesale market, undeniably will undermine competition in the retail market.⁹⁴

⁹¹ Joint Reply at 29-31.

⁹² See GTE Petition at16-19.

⁹³ Harris LD Affidavit at 23.

⁹⁴ Ironically, MCI's own expert, Dr. Carlton has previously recognized that deconcentration of the long distance market would benefit consumers. See Harris LD Affidavit a 33 (quoting the Affidavit of Kenneth J. Arrow and Dennis W. Carlton in C.A. No. 82-0192 (D.D.C. May 30, 1995)). As Dr. Harris shows, "in the interexchange (Continued...)

In response to showings that mass market long distance services are characterized by lock-step, above-cost pricing, WorldCom and MCI contend that "[r]eal average revenue per minute for long distance carriers has declined substantially . . . and real long distance prices have fallen even when access charges are netted out."

However, the first claim is irrelevant to the level of competitiveness in the market, and the second is untrue.

Declines in average revenue per minute ("ARPM") are entirely consistent with non-competitive pricing. As shown Dr. Harris's Affidavit, there are numerous ways in which the ARPM can decrease even when prices are not constrained by competition. ⁹⁶ For example, if business rates decrease and residential rates increase, residential customers (who generally pay more per minute than business customers) will consume less. This will decrease their representation in the average rate and lower the ARPM. Thus, a decreasing ARPM, without additional information, reveals nothing about the competitiveness of the market.

Contrary to the Applicants' claims, long distance rates have not decreased since 1984 as much as access charges, when volumes are held constant. In fact, a recent estimate shows that between 1984 and 1997, AT&T's annual carrier access bill

^{(...}Continued) industry there seems to be a very strong link between structure, conduct and performance. ... [I]f a decrease in concentration of the interexchange industry is likely to be of benefit, it follows that an increase in concentration is likely to harm consumer welfare by resulting in increased prices to end users." *Id.* at 33-34 and Exhibit 27.

⁹⁵ Joint Reply at 29.

⁹⁶ Harris LD Affidavit at 22.

dropped by \$10.3 billion while its customer bills dropped only \$8.5 billion (holding volumes constant).⁹⁷ Between 1991 and 1998, AT&T increased its basic rates by 24 percent, even as access charges dropped by 29 percent and its other operating costs presumably declined as well.⁹⁸ The Commission's continuing concern with this issue is reflected in Chairman Kennard's recent letters to AT&T, MCI, and Sprint challenging them to verify that they have passed through access charge savings to consumers.⁹⁹ If the retail market were truly competitive, there would be no way that the Big 3 could retain some of their access charge savings. It is only because conditions in the market are ripe for "conscious parallelism" – that is, an expectation that price moves by AT&T will be faithfully followed by MCI and Sprint – that the IXCs have been able to withhold some of the access charge reductions from consumers.¹⁰⁰

It is particularly telling that WorldCom's and MCI's own expert, Professor Hall, concedes that "[t]he standard rates of AT&T, MCI, and Sprint are quite similar and tend to move together . . ." In an effort to mitigate the impact of this concession, however, he goes on to assert that "[m]ost long-distance service is purchased at far better prices

⁹⁷ William E. Taylor and J. Douglas Zona, "An Analysis of the State of Competition in Long-Distance Telephone Markets," *Journal of Regulatory Economics*, May, 1997, pp. 227-256.

⁹⁸ Schmalensee/Taylor Affidavit at 4. Schmalensee and Taylor (at 6-8) also provide further evidence of the lock-step pricing practices of the Big 3 IXCs for residential and small business customers.

⁹⁹ See, e.g., Letter from FCC Chairman William Kennard to Bert Roberts of MCI (dated Feb. 26, 1998).

¹⁰⁰ See Harris LD Affidavit at 31-32.